SANTA CRUZ BIOTECHNOLOGY, INC.

KIBRA (V-13): sc-133374

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The Power to Question

BACKGROUND

KIBRA (kidney and brain protein), also known as WWC1 (WW and C2 domain containing 1) or HBEBP3, is a 1,113 amino acid protein that localizes to the cytoplasm and contains one C2 domain and 2 WW domains. Expressed in colon, brain, kidney and heart tissue, KIBRA is thought to interact with dendrin and, via this interaction, may play a role in collagen-induced signaling. Additionally, KIBRA, which exists as multiple alternatively spliced isoforms, is involved in memory performance and in the pathogenesis of Alzheimer's disease. The gene encoding KIBRA maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to cri-du-chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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2. Büther, K., et al. 2004. KIBRA is a novel substrate for protein kinase Czeta. Biochem. Biophys. Res. Commun. 317: 703-707.
3. Rayala, S.K., et al. 2006. Essential role of KIBRA in co-activator function of dynein light chain 1 in mammalian cells. J. Biol. Chem. 281: 19092-19099.
4. Papassotiropoulos, A., et al. 2006. Common KIBRA alleles are associated with human memory performance. Science 314: 475-478.
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7. Schaper, K., et al. 2008. KIBRA gene variants are associated with episodic memory in healthy elderly. Neurobiol. Aging 29: 1123-1125.
8. Corneveaux, J.J., et al. 2008. Evidence for an association between KIBRA and late-onset Alzheimer's disease. Neurobiol. Aging 31: 901-909.
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CHROMOSOMAL LOCATION

Genetic locus: WWC1 (human) mapping to 5q34; Wwc1 (mouse) mapping to 11 A4.

SOURCE

KIBRA (V-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of KIBRA of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-133374 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KIBRA (V-13) is recommended for detection of KIBRA isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

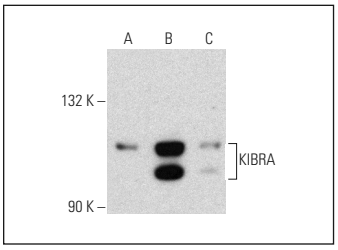
KIBRA (V-13) is also recommended for detection of KIBRA isoforms 1 and 2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for KIBRA siRNA (h): sc-91969, KIBRA siRNA (m): sc-146464, KIBRA shRNA Plasmid (h): sc-91969-SH, KIBRA shRNA Plasmid (m): sc-146464-SH, KIBRA shRNA (h) Lentiviral Particles: sc-91969-V and KIBRA shRNA (m) Lentiviral Particles: sc-146464-V.

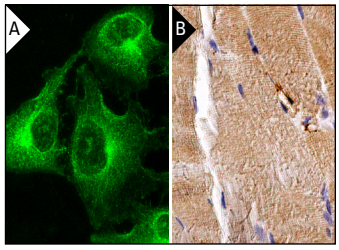
Molecular Weight of KIBRA: 125 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, IMR-32 cell lysate: sc-2409 or ZR-75-1 cell lysate: sc-2241.

DATA



KIBRA (V-13): sc-133374. Western blot analysis of KIBRA expression in MCF7 (**A**), IMR-32 (**B**) and ZR-75-1 (**C**) whole cell lysates.



KIBRA (V-13): sc-133374. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skeletal muscle tissue showing cytoplasmic staining of myocytes (**B**).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.